

Department of Natural Resources and Parks Water and Land Resources Division

Noxious Weed Control Program

201 South Jackson Street, Suite 600 Seattle, WA 98104 206-296-0290 TTY Relay: 711

email: noxious.weeds@metrokc.gov http://dnr.metrokc.gov/weeds/

Notes on Control of Field Bindweed (Perennial morning-glory)

(Convolvulus arvensis)

Bindweed seeds germinate in the fall and the spring and the seeds are long-lived (more than 20 years). Bindweed sprouts from both roots and rhizomes, and seedlings can regenerate roots when cut. The mature plant develops an extensive vertical and horizontal root system. The roots build up large food reserves and can survive underground for at least 3 years without needing to replenish food reserves. Roots left in the soil have been known to grow up through 5 feet of soil to the surface and resprout above ground.

Control Methods

- 1. **Hand-pulling** of seedlings or tilling young plants. Mature plants are difficult to pull without leaving behind root and rhizome fragments that resprout. Frequent hand pulling is a labor-intensive method that will eventually work with enough persistence.
- 2. **Smothering** the plants in order to starve the roots. This can be done with black plastic, straw, wood chips, paper or geotextiles (plastic-fiber mats). Whatever method is used, it is essential that the plants do not get any light for several years (3 years is a good estimate). Plastic can crack and plants can grow up through mulch if it isn't thick enough, but these methods are less expensive than geotextiles.
- 3. **Intensive cultivation** over several years combined with competitive cropping. Tilling should be too at least 4 inches. This method also starves the roots and the frequent tilling should get rid of new seedlings. Hand pulling of seedlings may be needed as a supplement.
- 4. **Herbicide application** in combination with the above techniques will increase their effectiveness but will not typically work alone. For home landscapes, *triclopyr* or *glyphosate* should be applied when the plants are in full bloom; $2,4-D \pm dicamba$ may be used for control as well.
 - ❖ If the leaves on the plant are young and very green, you might choose to use a product with glyphosate, such as Roundup. Glyphosate is taken in only by actively growing leaves so it is not effective on woody stems or on leaves that are dying back. If plants have been cut, you need to wait until they have grown back. Apply the herbicide at label recommended concentrations, evenly to all the green leaf surfaces so that they are thoroughly wet but not dripping. Roundup will injure any plants that it contacts so make sure not to drip herbicide

onto any desirable plants including grasses and shrubs. Rain will reduce the effectiveness of the herbicide so you will need a dry day or at least 6 hours without rain. Roundup has the advantage of not damaging future plantings or even nearby plants as long as their leaves are not sprayed. It will not move in the soil and it doesn't get absorbed through roots or woody trunks, only green tissue. Keep in mind that it may take two weeks or more until you are able to see the effects of the herbicide.

- ❖ Products with the active ingredient triclopyr also work; examples are Crossbow, Brush B Gone, and Blackberry Brush Killer. Triclopyr will not injure most grasses so it is a better choice in lawn areas. Also, triclopyr is taken up by leaves, stems, woody tissue and roots so it can sometimes be more effective. Again, spray actively growing plants and make sure to get an even coverage over the whole plant, including stems and root crowns. Again, be careful not to let herbicide drift onto nearby plants and do not let it get on trunks of trees or other stems since triclopyr is absorbed by woody tissue as well as green tissue. Like Roundup, triclopyr also does not stay in the soil very long so you will be able to replant the area. Look on the label for specific instructions.
- ❖ No matter what herbicide you choose, carefully follow the instructions on the label because it describes the legal way to apply the herbicide as well as the most effective and safe way. If you follow the label, you should not have problems with injuring other plants or harming any animals. After applying the herbicide, do not cut the plants down until they have died. This can take two weeks or more with Roundup and will be quicker with triclopyr. Cold temperature, below 65 degrees, also slows down the process so it may take more than two weeks to see results.

Please contact us if you have any additional questions.

King County Noxious Weed Control Program (206) 296-0290

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